

REMARKS

Status of the Claims

Upon entry of the instant amendment, claims 1-10 remain pending in the above-identified application and stand ready for further action on the merits.

In this Amendment, claim 5 has been amended to correct “ratio of 1 to 10 wt%” to “amount of 1 to 10 wt%” as the Examiner suggested.

Accordingly, the present amendments to the claims do not introduce new matter into the application as originally filed. As such entry of the instant amendment and favorable action on the merits is earnestly solicited at present.

Claim Rejection under 35 U.S.C. § 112, 2nd Paragraph

Claims 5 is rejected under 35 U.S.C. § 112, 2nd Paragraph. The rejection is respectfully traversed.

Applicants have amended claim 5 as the Examiner suggested. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested based on the amendment to claim 5.

Claim Rejections under 35 U.S.C. §§ 102 and 103

Claims 1, 2, 4 and 6-8 are rejected under 35 U.S.C. § 102(a) or (e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Saito et al. US ‘177 (US 2004/0137177).

Claims 3, 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito et al. US ‘177.

Further, claim 2 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito et al. US '177, as applied to claim 1, in further view of Mueller US '765 (US 2006/0093765).

Further, claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Saito et al. US '177, as applied to claim 1, in further view of Osame et al. US '940 (US 6,663,940).

Applicants respectfully traverse the rejection and request that the Examiner withdraw the rejections based on the following considerations.

The Present Invention

As recited in claim 1, the present invention is directed to a compartmented container. More specifically, the present invention is a multi-chamber container having its interior partitioned by a weak seal portion provided through detachable heat sealing so that multiple contents are accommodated separately from each other (the claimed feature 1), and the heat seal layer comprises a composition containing two types of propylene copolymers components (components A and B) of propylene and ethylene and/or a C₄-C₈ α -olefin (the claimed feature 2), and further, the components A and B have claimed elution properties that the ratio of the amount of elution to the total solution according to the TREF method (a temperature rising elution fractionation method) at the claimed temperature, *etc.* (temperature: 0 to 140°C, and solvent: ODCB (o-dichlorobenzene)) (with respect to component A: 15 wt% to 50 wt% at 0°C, and 5 wt% to less than 15 wt% at 60 to 90°C, and with respect to component B: 0 wt% to 25 wt% at 0°C, and 15 wt% to 70 wt% at 60 to 90°C) (the claimed feature 3).

Especially, because of the features 2 and 3, the heat sealable layer exhibits a wide range of temperature in which the change of seal strength is comparatively small for large change heat

sealing temperature. Because of this property, the weakly sealed part has a seal strength that can be controlled easily and freely (advantageous properties).

Distinctions over the Cited References and Nonobviousness of the Combination of the Cited References

The primary reference Saito et al. US '177 discloses a multi-chamber container comprising a resin film or sheet formed into a bag shape by heat-sealing and having a partition portion formed therein, said multi-chamber container including a heat-sealed portion comprising a propylene-based resin composition containing the following component (A) obtained by a first-stage polymerization and the following component (B) obtained by a second-stage polymerization such that the components (A) is contained in an amount of 10 to 60% by weight and the components (B) is contained in an amount of 40 to 90% by weight, based on a total weight of the components (A) and (B); Component (A): a polymer component containing propylene having an isotactic index of not less than 90% as a main component; and Component (B): a copolymer component comprising a copolymer produced from propylene and an .alpha.-olefin other than propylene having not more than 8 carbon atoms with the proviso that propylene and ethylene are contained therein as essential components, and containing a room-temperature xylene-insoluble component in an amount of from more than 20% by weight to 70% by weight based on a total weight of whole polymers as a sum of the components (A) and (B), and a room-temperature xylene-soluble component in an amount of from 10 to 60% by weight based on a total weight of whole polymers as a sum of the components (A) and (B), said room-temperature xylene-soluble component having a content of the .alpha.-olefin other than propylene of less than

20% by weight (see, e.g., claim 1). Saito et al. US '177, at best, discloses the claimed features 1 and 2.

However, Saito et al. US '177 fails to disclose or suggest the claimed feature 3 and also the advantageous properties of the present invention based on the claimed features 2 and 3. Further, even if Saito et al. US '177 discloses the claimed feature 2, a container of Saito et al. US '177 does not attain the wide range of temperature in which the change of seal strength is comparatively small for large change of heat sealing temperature as the present invention exhibits. Advantageous properties of the present invention is different from a property of Saito et al. US '177 in its degrees of ranges at a heat seal temperature, which can facilitate control of the seal strength at the weak seal portions. The difference between the present invention and Saito et al. US '177 is further clarified as Examples of the present application is compared with Examples of Saito et al. US '177. In Saito et al. US '177, the range of heat seal temperature at weak seal portion is 20°C of 120-140°C under the condition that a pressure of 4kgf/cm² (0.4 MPa) and a sealing time of 5 seconds is kept (TABLE 3 and paragraph [0151]). On the other hand, in the present invention, the range of heat seal temperature at weak seal portion is 35°C of 145-180°C under the condition that pressure of 0.2 MPa and a sealing time of 2 seconds are kept (Table 1 at page 25 of the specification). The wider range of heat seal temperature means that the seal strength is effectively controllable. Therefore, the present invention having 15°C wider range of heat seal temperature is superior to the Saito's in this property.

The difference of the properties between Saito's invention and the present invention is attributed to the copolymer having the claimed ratio of amount of elution, which is defined by the claimed analytical methods (*i.e.*, a measurement of an amount of elution to ODCB at temperatures of 0°C and 60-90°C (TREF method)). Saito et al. US '177 merely employs a

compound in accordance with a measurement of an amount of elution to xylene at room temperature. Especially, Saito's analytical method is based on a measurement at room temperature of $23\pm 2^{\circ}\text{C}$ (paragraph [0106]), and thus the compound employed in Saito et al. US '177 should be distinguishable from the claimed compounds. (Incidentally, the analysis method of the present invention is based on a measurement at low and high temperature regions of 0°C and $60\text{-}90^{\circ}\text{C}$, and thus the method is much more accurate to determine the properties of a composition than the method as disclosed in Saito et al. US '177.)

Thus, Saito et al. US '177 fails to disclose or suggest the claimed feature 3 and the advantageous property attained by the claimed features 2 and 3.

Next, the secondary reference Mueller US '765 discloses a multi-compartment pouch comprising: front and rear sheets arranged in opposing face-to-face relation and each including a top edge, a bottom edge, and opposite side edges adapted to be connected to define a sealed pouch with an interior; and at least one frangible seal disposed in the interior of the pouch between said front and rear sheets and defining at least two separate compartments, said frangible seal comprising a first thermoplastic material attached to said front sheet and a second thermoplastic material attached to said rear sheet, said first and second materials arranged in opposing face-to-face relation across the interior of the pouch and attached to one another to define a frangible seal therebetween, said frangible seal having a seal strength that is less than the seal strength of the first material to the front sheet and the second material to the rear sheet (see, *e.g.*, claim 1). The secondary reference Mueller US '765 discloses the claimed feature 1.

However, Mueller et al. US '765 fails to disclose or suggest the claimed features 2 and 3, and also the advantageous properties of the present invention.

Further, another secondary reference, Osame et al. US '940 discloses a polypropylene multi-layer sealant film for retort packaging, comprising a multi-layer film composed mainly of at least one polypropylene polymer and to be laminated on one surface of a heat-resisting film, the multi-layer film having a first surface facing the heat-resisting film when laminated therewith and further having a second surface on the other side, the first surface having a surface roughness as defined below in (1), and the second surface having a surface roughness as defined below in (2): (1) (i) center-line mean roughness (R_a): 0.020 to 0.250 μm ; (ii) maximum height (R_{max}): 0.3 to 2.9 μm ; and (iii) ten-point mean roughness (R_z): 0.2 to 2.4 μm ; (2) (i) center-line mean roughness (R_a): 0.050 to 0.300 μm ; (ii) maximum height (R_{max}): 3.0 to 13.0 μm ; and (iii) ten-point mean roughness (R_z): 2.5 to 11.5 μm (see, *e.g.*, claim 1).

However, Osame et al. US '940 fails to disclose or suggest the claimed features 1, 2 and 3, and the advantageous properties of the present invention.

Therefore, the present invention is distinguished from each of the cited references. Also, as explained above, since none of the cited references discloses or suggests, at least, the claimed feature 3, a *prima facie* case of obviousness is not established based on the combination of the cited references. Likewise, there is not provided any rationale and/or reasonable expectation of success based on the combination of the cited references, by which one skilled in the art could arrive at the present invention as claimed. Thus, it is submitted that the present invention is not obvious over the primary reference Saito et al. US '177 in view of the secondary references (Mueller US '765 and Osame et al. US '940).

Based on the foregoing considerations, Applicants respectfully request that the Examiner withdraw the rejections.

Conclusion

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of the pending claims is allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Toyohiko Konno, Reg. No. L0053 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Director is hereby authorized in this, concurrent, and future replies to charge any fees required during the pendency of the above-identified application or credit any overpayment to Deposit Account No. 02-2448.

Dated: December 21, 2009

Respectfully submitted,

By 

Gerald M. Murphy, Jr.

Registration No.: 28977

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East

P.O. Box 747

Falls Church, VA 22040-0747

703-205-8000